Information Requested from the Miami Fort Station

Responses to EPA Questions for Miami Fort Generating Station are provided below. All CBI designated data is noted within each response and is provided in a separate submittal.

1. For certain dates between July 1, 2009 and May 24, 2011, UWAG provided, as part of their comments, mercury concentration data for the effluent from the Miami Fort Station's chemical precipitation treatment system for FGD wastewater. EPA requests that Duke Energy confirm that the data submitted reflect all available effluent data for mercury for that time period. EPA also requests that Duke Energy provide all arsenic and mercury concentration data for the influent to the plant's chemical precipitation system and all arsenic concentration data for the effluent from the plant's chemical precipitation system for this time period (i.e., 7/1/2009-5/24/2011). Additionally, for EPA to further evaluate the quality of the data, the Agency requires supplemental information to support these submitted data (described in Attachment 1).

   Response:
   a. *See USEPA Analytical Data Table MFS_3_26_14*
      i. *NPDES Sample point 601 is the influent, also called USEPA Sample Point 1 (SP1).*
      ii. *NPDES Sample point 608 is the effluent, also called USEPA Sample Point 2 (SP2).*
      iii. *Note flow information (gpd) is based on Midnight to Midnight. These may differ slightly from the values provided during the EPA monthly sampling episodes which were based on the start and finish of the composite sampler.*

2. EPA requests that Duke Energy provide all available existing data for arsenic and mercury representing the influent to and effluent from Miami Fort Station's chemical precipitation system for FGD wastewater, for the period May 25, 2011 through December 31, 2013. Please also provide the supplemental information for these data as described in Attachment 1.

   Response:
   a. *Same Spreadsheets as #1 above*

3. Please identify the organosulfide additive (e.g., vendor trade name) used in the FGD wastewater treatment system corresponding to the data requested above in #1 and #2.

   Response:
   This is information is confidential business information (CBI) and responses are included in the word document "CBI Q A US EPA data request 3_26_14."

4. Please provide the specifications that are used to determine appropriate coals for use at the plant (i.e., specify the factors that limit the use of specific coals at the plant, such as chlorine content and sulfur content).

   Response:
   This is information is CBI and responses are included in the word document "CBI Q A US EPA data request 3_26_14."

5. Please provide the type and source (i.e., mine name and location) of coal used •at the plant each day from January 2012 through December 2013. In addition, please provide the sulfur and chlorine content of the coal used at the plant for each day of this period, if available. For days where coal blending occurred, please note the percentage of each type of coal used.

   Response:

This is information is CBI and responses are included in the word document "CBI Q A US EPA data request 3_26_14."

6. Please provide the following information for each day within the range of sampling results that are being provided (including the time period for which UWAG provided sampling results), if available:

Response:

See USEPA Analytical Data Table MFS_3_26_14

a. Chloride concentration, pH, and average daily oxidation-reduction potential (ORP) values within each FGD scrubber system;

- *U7 and U8 Absorber daily sample: Chloride, pH, ORP values are shown. Note these are not averages.*

b. Chloride concentration, pH, and average daily ORP values for the influent to the FGD wastewater treatment system; and

- *FGD Waste Water Treatment System Influent: Chloride, pH, ORP. Note these measures are not included in normal daily process sampling. Occasionally during testing they are measured. If available, the grab sample values are provided. Note these are not averages.*

c. Electric generation output (MW-hr) for each generating unit serviced by a FGD system. Provide FGD operating data for sample dates between 7/1/2009 – 12/31/2013

This is information is confidential business information (CBI). Refer to SE04643A1_Data Request Spreadsheet_Miami Fort 01222014_3_26_14

Answers to EPA Attachment 1 – Guidelines for Submitting analytical Data for the SEEG. Page 6

Important Considerations

Bullet #3. Analytical data is from samples taken at USEPA SP1 (NPDES 601). This is the same measuring location used during the USEPA sampling events. The Secondary Hydroclone overflow flows into the WWTS Equalization Tank, so this represents the unmixed bleed from U7 FGD or U8 FGD systems.

Data Submission Format and Criteria

Analytical Data Table - The "Analytical Data Table MFS" was modified to add two columns. US EPA asked for individual test sample values when available. A column was added to show analytical sample values for U7 sample point 601 WWTS Influent, and U8 sample point 601 WWTS Influent. The average value is also provided in a third column because this was the value reported to OHEPA DMR, and may appear in other data reports.

Analytical Data Table - Flow Rate (gpd) (Column U) – Flow rate data between Sept 2011 and March 2013 is not available due to a computer server backup problem for the PI (process information server). If the flow rates were tabulated in another report they are shown, as well as the flow rate data after March 2013.

Analytical Data Table - Column "X" is used to identify lab information for split samples. Frequently there are different results obtained from different labs on the same water sample. This is not an exhaustive study of this issue but demonstrates the variability that can exist from lab to lab.

Dewatering System – Miami Fort uses primary and secondary Hydroclones and vacuum belt filters for gypsum dewatering.

Type of Treatment – Miami Fort uses a "chemical precipitation" treatment system for the Waste Water Treatment process. It was identified as WWT-1 in the USEPA ICR submittal.

Chemicals – Chemicals, dosages, injection points – previously provided in the Engineering Submittal for the USEPA monthly sampling events Test #1 9/27-28/2010 thru Test #4 1/13-14/2011.

Process Flow Diagram – PFD See the following drawing:

This information is CBI. Process Flow Diagram Miami Fort FGD Wastewater Treatment System 46585001

System Start Date – The WWTS began treating FGD blow-down on 6/11/2007

Waste Streams Treated – U7 and U8 blow-down from the secondary Hydroclone overflow are the only waste streams treated. Approximately 50% U7 and 50% U8 over a year. U7 and U8 can burn the same coal; however, the % sulfur and the % Chlorine in the coal will determine the daily blow-down from each unit.

Laboratory reports – Lab reports have been provided for the sample points on as many days as available.